

In re Application of LEVIDOW et al.
Application No. 10/040,222

Amendments to the Claims

1. (Currently Amended) A computer-implemented method for obtaining information about a shutdown of a computer, the computer having an operating system managing at least one user-mode process, the shutdown of the computer including a shutdown of the operating system, the method comprising:
 - presenting a user with a plurality of reasons for the shutdown of the computer;
 - receiving a user selection of at least one of the plurality of reasons;
 - storing the selected reason in the a memory; and
 - capturing the state of the at least one user-mode process for subsequent analysis.
2. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 1.
3. (Original) The method of claim 1, further comprising:
 - retrieving the plurality of reasons from a system database; and,
 - presenting the retrieved reasons to the user.
4. (Original) The method of claim 3, wherein the reasons are retrieved from entries located in a system database, wherein each reason entry indicates whether the reason is to be displayed during a shutdown of the computer, or during a restart of the computer following a shutdown.
5. (Original) The method of claim 1, wherein at least one of the plurality of reasons is user-configurable.
6. (Original) The method of claim 1, further comprising:
 - receiving from the user a typed-in description of at least one reason for the shutdown; and,
 - storing the typed-in description in the memory.

In re Application of LEVIDOW et al.
Application No. 10/040,222

7. (Original) The method of claim 1, further comprising:
receiving from the user a selection of whether the shutdown was planned or unplanned; and,
storing the planned or unplanned selection in the memory.
8. (Original) The method of claim 1, wherein the user initiates the shutdown of the computer and selects one or more reasons for shutting down the computer at a remote computer that is in communication with the computer being shut down.
9. (Original) The method of claim 1, further comprising prompting the user to enter the shutdown reason in response to the user initiating a shutdown of the computer.
10. (Original) The method of claim 1, further comprising prompting the user to enter the shutdown reason in response to the user restarting the computer subsequent to the computer being shutdown.
11. (Original) The method of claim 1, wherein the reason is received via a command line interface.
12. (Original) The method of claim 11, wherein the reason is received in the form of a reason code.
13. (Original) The method of claim 1, further comprising receiving a user indication of a remote machine that is being shutdown.
14. (Original) The method of claim 1, further comprising:
determining, based on the user specified selection, whether the shutdown is planned or unplanned; and
if the shutdown is determined to be unplanned, performing the capturing step.

In re Application of LEVIDOW et al.
Application No. 10/040,222

15. (Currently Amended) A computer-implemented method for obtaining information about a shutdown of a computer, the method comprising:
~~at a command-line interface,~~ receiving a user entry of a command to shut down the computer along with at least one shutdown reason code;
searching a list of predefined shutdown reason codes to determine whether the entered shutdown reason code is recognized;
if the entered reason code is recognized, storing the entered reason code in a memory;
if the entered reason code indicates that the shutdown is unplanned, taking a snapshot of the a current state of each of a plurality of user-mode processes, the snapshot comprising at least one parameter of each user-mode process; and
storing the snapshot in a non-volatile memory.

16. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 15.

17. (Original) The method of claim 15, wherein the receiving step further comprises receiving the name of the computer that is being shutdown, and wherein the storing step further comprises storing the reason code on a memory of the named computer.

18. (Original) The method of claim 15, wherein the receiving step further comprises receiving the name of the computer that is being shutdown, and wherein the storing step further comprises storing the snapshot on a memory of the named computer.

19. (Currently Amended) A computer-implemented method for obtaining information about a shutdown of a computer, wherein the computer has a memory and an operating system managing a plurality of user-mode processes, the shutdown of the computer including a shutdown of the operating system, the method comprising:

In re Application of LEVIDOW et al.
Application No. 10/040,222

receiving from a user a reason for shutting down the computer, wherein the reason is one of a plurality of predefined shutdown reasons;

taking a snapshot of ~~the~~ a state of all each of the plurality of user-mode processes that are running on the computer at the time of the shutdown; and

storing the received reason and the snapshot in the memory.

20. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 19.

21. (Original) The method of claim 19, further comprising, in response to the user initiating the shutdown of the computer, prompting the user to enter the shutdown reason.

22. (Original) The method of claim 19, further comprising, in response to the user rebooting the computer after an unexpected shutdown, prompting user to enter the reason for the unexpected shutdown.

23. (Currently Amended) A method for obtaining information about ~~the~~ a shutdown of a computer having an operating system managing a plurality of user mode processes, the shutdown of the computer including a shutdown of the operating system, the method comprising:

in response to a user initiating the shutdown of the computer:

retrieving a list of preconfigured shutdown reasons from a database on the computer;

presenting the list of preconfigured shutdown reasons to the user;

prompting the user to select one or more of the preconfigured reasons;

storing the selected preconfigured reason or reasons in a log file on the computer;

if the selected shutdown reason indicates that the shutdown is unplanned, taking a snapshot of the current state of the plurality of user mode processes on the computer;

storing the snapshot on a non-volatile memory of the computer and,

shutting down the computer.

In re Application of LEVIDOW et al.
Application No. 10/040,222

24. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 23.

25. (Original) The method of claim 23, further comprising:
prompting the user to select whether the shutdown is planned or unplanned; and,
storing the planned or unplanned selection in the log file.

26. (New) The method of claim 15, wherein the snapshot further comprises:
at least one pagefile parameter; and
at least one system parameter.

27. (New) The method of claim 26, wherein the at least one pagefile parameter comprises a peak utilization amount of a pagefile.

28. (New) The method of claim 26, wherein the at least one system parameter comprises an amount of an operating system kernel in a volatile memory at the time of shutdown.

29. (New) The method of claim 15, wherein the snapshot comprises, for each user-mode process, an amount of memory utilized by the process.

30. (New) The method of claim 15, wherein the snapshot comprises, for each user-mode process, a relative priority of the process.

31. (New) The method of claim 15, wherein the snapshot comprises, for each user-mode process, a number of pointers to blocks of memory utilized by the process.

In re Application of LEVIDOW et al.
Application No. 10/040,222

32. (New) The method of claim 15, wherein the snapshot comprises, for each user-mode process, a number of threads of execution associated with the process.

33. (New) The method of claim 15, wherein the snapshot comprises extensible markup language (XML).